



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/699,660

11/04/2003

Ching-Hui Chen

TAIW 184

6469

7590
RABIN & BERDO, P.C.
Suite 500
1101 14 Street, N.W.
Washington, DC 20005

10/19/2007

EXAMINER

STOREY, WILLIAM C

ART UNIT

PAPER NUMBER

4115

MAIL DATE

DELIVERY MODE

10/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/699,660

Applicant(s)

CHEN ET AL.

Examiner

William C. Storey

Art Unit

4115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 9 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 9 & 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In claims 1 & 11, the applicant describes the dynamic scanning unit moving in a direction normal to the longitudinal axis of the scan platform, whereas in claim 9 & 18, the applicant describes the dynamic scanning unit moving in parallel to the longitudinal axis of the scan platform.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 6, 7, 8, 9, 10, 11, 13, 15, 16, 17, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yada et al. (US Patent Publication 2005/0099660), hereinafter referred to as Yada, in view of Arter et al. (US Patent 4367947), hereinafter referred to as Arter.

Yada discloses a multi-function peripheral, comprising:
a casing; a scanning module located on the top side of the casing having a scan

Art Unit: 4115

platform and a dynamic scanning unit for capturing image data; and a printing module located below the scan platform. Yada discloses figure 1, depicting an enclosed, which reads on claimed casing, multi-function-peripheral 1. The multi-function-peripheral (mfp) of figure 1 contains a scanner section 10, which reads on claimed scanning module located on the top side of the casing; an original bed glass 12, which reads on claimed scan platform; reading carriage 16, which reads on claimed dynamic scanning unit for capturing image data, as disclosed in figures 1-3 and in paragraphs 171, 172, 173, and 163. Yada discloses a printer section 30 that adopts the inkjet method, which reads on claimed inkjet printing module located below the scan platform; a writing carriage 36, which reads on claimed dynamic printing unit which drives at least one ink cartridge moving to perform printing operation; as disclosed in figures 1-3 and paragraphs 179 and 181.

However, Yada fails to disclose a scanning plate longitudinally oriented to an output tray and another method to move the scanning plate. However, the examiner maintains that it was well known in the art to provide a scanning plate longitudinally oriented to an output tray and another method to move the scanning plate, as taught by Arter.

In a similar field of endeavor, Arter discloses a document feeder for moving bed machines such as copiers. In addition, Arter discloses a layout with the scanning tray longitudinally inline with scanning and printing output trays, as disclosed in figure 1, column 4, lines 1-2 and lines 66-68. It was well known in the art at the time of the present invention as evidenced by Yada to situate an inkjet carriage laterally facing the

Art Unit: 4115

output of paper, as disclosed in Yada Figure 4, where 36 is the ink writing carriage and 341 is the paper discharge tray, as disclosed in paragraph 165 and 181. The lateral alignment of the writing carriage with respect to the paper discharge tray would read on claimed the ink cartridge have a moving path substantially normal to the longitudinal axis of the scan platform when combined with the previous disclosure by Arter. Yada discloses access of the ink cartridge by lifting the scanning plate as shown in Figure 4 and Arter shows a method of moving the scanning plate longitudinally between figure 2 and figure 3. These methods which may allow access to the inner cavity would allow access to the ink cartridge when it is at its distal end and would allow for the removal of the ink cartridge, which read on claimed the ink cartridge escaping the scan platform form under thereof when being moved to a distal end of the dynamic printing unit at a cartridge replacing position, as disclosed in the aforementioned figures and Yada paragraph 166.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yada by specifically providing a scanning plate longitudinally oriented to an output tray and another method to move the scanning plate, as taught by Arter, for the purpose of easier transitioning of scanning document.

Regarding claim 2, Yada and Arter disclose everything applied above for claim 1. In addition, Yada and Arter disclose the multi-function peripheral of claim 1, wherein the casing has a paper conveying path which consists of a paper feeding path and a paper discharge path, the paper discharge path being substantially in parallel with the longitudinal axis of the scan platform. Yada discloses a paper supply tray 321, which

Art Unit: 4115

reads on claimed paper feeding path; and paper discharge tray 341, which reads on claimed paper discharge path; and the combination of paper supply tray 321, paper discharge tray 341, and the paper flow constituted by these two trays reads on claimed paper conveying path, as disclosed in figure 1 and paragraph 165. The previous disclosure by Arter of a longitudinally oriented scanning plate inline with the output trays reads on claimed paper discharge path being substantially in parallel with the longitudinal axis of the scan platform.

Regarding claim 4, Yada and Arter disclose everything as applied above in claim 2. In addition, Yada discloses wherein the paper conveying path is formed in an L-shape. Yada discloses the flow of paper from the paper supply area 32, which flows in an L-type flow, which reads on claimed wherein the paper conveying path is formed in an L-shape, as disclosed in figure 6, figure 1, and paragraph 181.

Regarding claim 6, Yada and Arter disclose everything as applied above in claim 2. In addition, Yada discloses wherein the paper feeding path ranges from a paper feeding chute located on a backside of the casing to the inkjet printing module and the paper discharge path ranges from the inkjet printing module to a paper exit chute located below the scan platform. Yada discloses the paper feeding chute 321 and the paper supply section 32, which reads on claimed paper feeding chute located on a backside of the casing; sending the paper through to a printing head 38, which reads on claimed inkjet printing module; and from there the paper is ejected by a discharge roller 39, which send the paper out to the paper discharge section 34, which reads on claimed

Art Unit: 4115

paper exit chute below the scan platform, as disclosed at figure 1, figure 6, paragraph 181, and paragraph 185.

Regarding claim 7, Yada and Arter disclose everything as applied above for claim 1. In addition, Yada discloses wherein the casing has a cartridge lid located on one side of the cartridge replacing position, the cartridge lid is liftable to expose the position of the ink cartridge. Further, Yada discloses the scanner unit 10, which reads on claimed cartridge lid; hinged at the rear side, which reads on claimed located on one side of the cartridge; which can be lifted on one side to expose the inside of the printing section and allow for exchange of the ink cartridge, which reads on claimed cartridge lid is liftable to expose the position of the ink cartridge, as disclosed in figure 4 and paragraph 166.

Regarding claim 8, Yada and Arter disclose everything as applied above for claim 7. In addition, Yada discloses wherein the cartridge lid has a control panel thereon. Further, Yada discloses a control panel section 70, which resides on scanner section 10, and which reads on claimed the cartridge lid has a control panel thereon, as disclosed at figure 2, figure 4, and paragraph 164.

Regarding claim 9, Yada and Arter disclose everything as applied above for claim 1. In addition, Yada discloses wherein the dynamic scanning unit has a scanning path substantially parallel with the longitudinal axis of the scan platform. Further, Yada discloses Figure 2 and Figure 4, which depict lateral movement of writing head 36, which reads on claimed dynamic scanning unit, as disclosed in paragraph 181; with respect to the longitudinal axis of bed glass 12, which reads on claimed scan platform.

Regarding claim 10, Yada and Arter disclose everything as applied above for claim 1. In addition, Yada discloses wherein the moving path of the ink cartridge is greater than the width in the direction of the short axis of the scan platform. Yada discloses figures 2 and figure 4, which show both the short axis of the scan platform and the length of the moving path of the ink cartridge being greater than the short axis of the scan platform, which reads on claimed wherein the moving path of the ink cartridge is greater than the width in the direction of the short axis of the scan platform.

Regarding claim 11, claim 11 is rejected for the same reasons as claim 1. In addition, Yada discloses a paper supply tray 321, which reads on claimed paper feeding path; and paper discharge tray 341, which reads on claimed paper discharge path; as disclosed in figure 1 and paragraph 165.

Regarding claim 13, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 13 is rejected for the same reasons as claim 4.

Regarding claim 15, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 15 is rejected for the same reasons as claim 6.

Regarding claim 16, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 16 is rejected for the same reasons as claim 7.

Regarding claim 17, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 17 is rejected for the same reasons as claim 8.

Regarding claim 18, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 18 is rejected for the same reasons as claim 9.

Art Unit: 4115

Regarding claim 19, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 19 is rejected for the same reasons as claim 10.

4. Claims 3, 5, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yada in view of Arter and further in view of Cooper et al. (US Patent 5774141), hereinafter referred to as Cooper.

Regarding claim 3, Yada and Arter disclose everything as applied above for claim 2. However, Yada and Arter fail to disclose the paper conveying path in a C-shape. However, the examiner maintains that it was well known in the art to provide C-shape, as taught by Cooper.

In a similar field of endeavor, Cooper discloses a carriage-mounted inkjet aerosol reduction system. In addition, Cooper discloses a moving paper from feed tray 28 to print zone 25 for printing along a gear shaft, which reads on claimed paper conveying path formed in a C-shape, as disclosed in figure 1 and column 3, lines 54-58.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yada and Arter by specifically providing the paper conveying path in a C-shape, as taught by Cooper, for the purpose of a more compact design.

Regarding claim 5, Yada and Arter disclose everything as applied above for claim 2. However, Yada and Arter fail to disclose wherein the paper feeding path ranges from a paper feeding cartridge located below the scan platform to the inkjet printing module, and the paper discharge path ranges from the inkjet printing module to a paper exit chute located between the scan platform and the paper feeding cartridge.

Art Unit: 4115

However, the examiner maintains that it was well known in the art to provide wherein the paper feeding path ranges from a paper feeding cartridge located below the scan platform to the inkjet printing module, and the paper discharge path ranges from the inkjet printing module to a paper exit chute located between the scan platform and the paper feeding cartridge, as taught by Cooper.

In a similar field of endeavor, Cooper discloses a carriage-mounted inkjet aerosol reduction system. In addition, Cooper discloses paper going from the paper tray 28, which reads on claimed paper feeding cartridge located below the scan platform; to the print zone 25 and inkjet carriage 50, which read on claimed inkjet printing module and in totality from the beginning of the sentence, the paper feeding path, as disclosed in figure 1, column 4, lines 19-21, and column 3, lines 54-58. In addition, from the inkjet carriage 50, the paper goes to an output tray 38, which reads on claimed paper exit chute located between the scan platform and the paper feeding cartridge, and in totality from the beginning of the sentence, the paper discharge path; as disclosed in figure 1 and column 3, lines 59-64.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yada and Arter by specifically providing wherein the paper feeding path ranges from a paper feeding cartridge located below the scan platform to the inkjet printing module, and the paper discharge path ranges from the inkjet printing module to a paper exit chute located between the scan platform and the paper feeding cartridge, as taught by Cooper, for the purpose of a more compact design.

Art Unit: 4115

Regarding claim 12, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 12 is rejected for the same reasons as claim 3.

Regarding claim 14, Yada and Arter disclose everything as applied above for claim 11. In addition, claim 14 is rejected for the same reasons as claim 5.

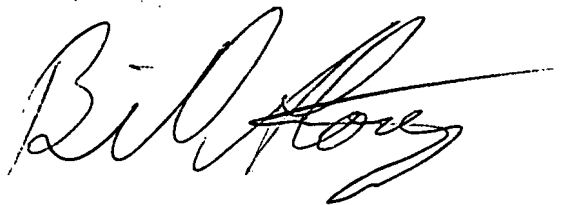
Art Unit: 4115

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Storey whose telephone number is 571-270-3576. The examiner can normally be reached on Monday - Friday (Alternate Fridays off) 7:30-5 EST.

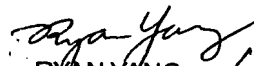
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jefferey F. Harold can be reached on 571-272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William C Storey
Examiner
Art Unit 4115

WCS


RYAN YANG 10/17/07
PRIMARY EXAMINER